THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 28

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RUDIGER HECKEROTH, and
BERND PETZOLD

Appeal No. 1996-2958
Application 08/150,053

HEARD: FEBRUARY 10, 2000

Before HAIRSTON, RUGGIERO and HECKER, Administrative Patent Judges.

RUGGIERO, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1 through 17. An amendment after final rejection was filed August 7, 1995 and was entered by the Examiner as indicated in the Advisory Action dated August 30,1995. In this Advisory Action, the Examiner stated that the rejections

of claims 1 through 11, 16, and 17 on non-reference grounds was overcome. Further, claims 8 through 10 were noted by the Examiner as containing allowable subject matter and were objected to as being dependent on a rejected claim. Accordingly, this appeal involves only claims 1 through 7 and 11 through 17.

The claimed invention relates to a method and apparatus for regulating traffic in a traffic restriction area with movable light signaling equipment including mobile traffic lights. More particularly, Appellants indicate at pages 2 through 5 of the specification that traffic flow through the restricted area is optimized by determining a clearance time based on the sensed transit time of vehicles traveling through the restricted area. This clearance time is referred to as a "red phase" since, during this time period, the traffic lights at opposite ends of the restriction area are both red.

Claim 1 is illustrative of the invention and reads as follow:

> 1. A method for regulating traffic with movable light signaling equipment including mobile traffic lights, in traffic restriction areas using sensor controls which prescribe go times defined as green phases and clearance times defined as red phases in the traffic

restriction area to be secured, a traffic restriction area being an area along a blocked stretch of roadway in which traffic is restricted by the light signalling equipment, the method comprising:

sensing traffic and measuring the transit times of vehicles over a measured distance extending substantially along the traffic restriction area to be secured with the sensor controls;

determining the clearance time as a function of the transit time measurements obtained; and

controlling the light signaling equipment to regulate traffic in the traffic restriction area to be secured based on the determined clearance time.

The Examiner relies on the following prior art:

Marcy	4,390,951	Jun. 28, 1983
Kishi	5,252,969	Oct. 12, 1993

(Filed Jun. 18, 1991)

Claims 1 through 7 and 11 through 17 stand finally rejected under 35 U.S.C. § 103 as being unpatentable over Marcy in view of Kishi.

Rather than reiterate the arguments of Appellants and the Examiner, reference is made to the Briefs[1] and Answers

[1] The Appeal brief was filed November 29, 1995. In response to the Examiner's Answer dated March 20, 1996, a Reply brief was filed May 20, 1996. The Examiner entered the Reply Brief and submitted a Supplemental Examiner's Answer on July 19, 1996. A Supplemental Reply Brief filed by Appellants

for the respective details thereof.

OPINION

We have carefully considered the subject matter on appeal, the rejection advanced by the Examiner, the arguments in support of the rejection and the evidence of obviousness relied upon by the Examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, Appellants' arguments set forth in the Briefs along with the Examiner's rationale in support of the rejections and arguments in rebuttal set forth in the Examiner's Answers.

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would not have suggested to one of ordinary skill in the art the obviousness of the invention set forth in claims
1 through 7 and 11 through 17. Accordingly, we reverse.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to

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on August 13, 1996 was acknowledged and entered by the Examiner without further comment on September 16, 1996.

support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hosp.

Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929,
933 (Fed. Cir. 1984). These showings by the Examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

With respect to independent claims 1 and 12, the Examiner proposes to modify the traffic signal light regulating system of Marcy by relying on Kishi to supply a teaching of utilizing movable or portable traffic lights. In the Examiner's view, the skilled artisan would have found it obvious to make the traffic light system of Marcy portable so as to facilitate installation in temporary situations in view of the teachings of Kishi. (Answer, page 4).

In response, Appellants assert the failure of the Examiner to establish a prima facie case of obviousness since Marcy, the primary reference relied on by the Examiner, fails to disclose a number of features recited in the claims on appeal. Upon careful review of the Marcy and Kishi references in light of the arguments of record, we are in agreement with Appellants' stated position in the Briefs.

As pointed out by Appellants (Brief, pages 8 and 9), Marcy is not concerned with regulating traffic in a traffic restriction area along a blocked stretch of roadway and, further, in contrast to the claimed plural traffic lights, Marcy discloses only a single traffic light. We are further in agreement with Appellants' contention (Brief, page 11) that Marcy does not determine "clearance time" defined in the context of the claims as "red phases" in the traffic restriction area. These "red phases" define the time that the signal lights at each end of the traffic restriction area are red allowing traffic in the restricted area to "clear" the area before traffic is permitted to flow in the opposite direction on a green light cycle. In our view, for the most fundamental reason, this feature is completely lacking in Marcy since only one signal light, and that at a traffic intersection rather than at a blocked restricted area, is disclosed.

Further, our review of the Kishi reference, which the Examiner has relied on solely to address the claimed movable or portable signal light feature, reveals no disclosure which would overcome the deficiencies of Marcy discussed supra.

While Kishi teaches movable traffic lights for regulating traffic in a restricted area, the light signal control is based on fixed timer cycles which synchronize operation of the lights at both ends of the restricted area. In our view, this falls well short of the dynamic control of clearance time based on measured transit times recited in the claims on appeal. We also note that, notwithstanding the individual differences between the claimed features and the applied Marcy and Kishi references, it is our view that no suggestion or motivation exists in the references for combining or modifying teachings to establish a prima facie case of obviousness. The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. In re Fritch, 972 F.2d 1260, 1266 n. 14, 23 USPQ2d 1780, 1783-84 n. 14 (Fed. Cir. 1992). As discussed previously, Marcy discloses the controlling of traffic flow through an intersection using a single traffic light based on a dynamically changing calculated parameter identified as “encumbrance.” Kishi, on the other hand, synchronizes traffic signals located at ends of a traffic

restriction area utilizing fixed timer cycles. In our view, these traffic control techniques are so opposite in approach that any motivation to combine them must have resulted from an improper attempt to reconstruct Appellants' invention in hindsight.

In summary, we are left to speculate why one of ordinary skill would have found it obvious to modify the applied prior art to make the combination suggested by the Examiner. The only reason we can discern is improper hindsight reconstruction of Appellants' claimed invention. In order for us to sustain the Examiner's rejection under 35 U.S.C. § 103, we would need to resort to speculation or unfounded assumptions or rationales to supply deficiencies in the factual basis of the rejection before us. In re Warner, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967), cert. denied, 389 U.S. 1057 (1968), reh'g denied, 390 U.S. 1000 (1968). Since we are of the view that the prior art applied by the Examiner does not support the rejection, we do not sustain the rejection of independent claims 1 and 12, nor of dependent claims 2 through 7, 11, and 13 through 17. Therefore, the Examiner's decision rejecting claims 1 through

7 and

11 through 17 under 35 U.S.C. § 103 is reversed.

REVERSED

KENNETH W. HAIRSTON Administrative Patent Judge	)	
JOSEPH F. RUGGIERO Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
STUART N. HECKER Administrative Patent Judge	)	

JFR:hh

VENABLE
P.O. BOX 34385
WASHINGTON, D.C. 20043-9998